AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

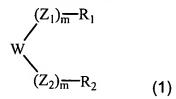
- 1-4. (Cancelled)
- 5. (Currently Amended) <u>At least one chemical entity of claim 21 The-</u>
 compound, pharmaceutically acceptable salt, hydrate, solvate, crystal form,
 diastereomer, prodrug, or mixture thereof according to claim 1, wherein the chemical
 entity is compound or salt is 3,5-bis-(4-phenoxyphenyl)-pyrazin-2-ylamine.
- 6. (Cancelled)
- 7. (Currently Amended) <u>At least one chemical entity of claim 21–The-compound, pharmaceutically acceptable salt, hydrate, solvate, crystal form, diastereomer, prodrug, or mixture thereof according to claim 1, wherein the compound at least one chemical entity or salt is N3-(2-methoxybenzyl)-5-(4-phenoxyphenyl)-pyrazine-2,3-diamine.</u>
- 8. (Cancelled)
- 9. (Currently Amended) At least one chemical entity of claim 21 The-compound, pharmaceutically acceptable salt, hydrate, solvate, crystal form, diastereomer, prodrug, or mixture thereof according to claim 1, wherein the compound at least one chemical entity is 4-chloro-N-(3-{6-[(4-chlorobenzyl)-methylamino]-pyrazin-2-yl}-phenyl)-benzamide.
- 10. (Currently Amended) <u>At least one chemical entity of claim 21 The</u>
 compound, pharmaceutically acceptable salt, hydrate, solvate, crystal form,
 diastereomer, prodrug, or mixture thereof according to claim 1, wherein the compound

<u>at least one chemical entity</u> is 4-chloro-N-(3-{6-[(4-chlorobenzyl)-methylamino]-pyrazin-2-yl}-phenyl)-benzenesulfonamide.

11-13. (Cancelled)

- 14. (Currently Amended) At least one chemical entity of claim 21 Thecompound, pharmaceutically acceptable salt, hydrate, solvate, crystal form,
 diastereomer, prodrug, or mixture thereof according to claim 1, wherein in an in vitro
 assay of kinase modulation, the compound at least one chemical entity exhibits an a
 IC₅₀ value less than or equal to 25 micromolar.
- 15. (Currently Amended) A pharmaceutical composition comprising <u>at least</u> one chemical entity of claim 21 the compound, pharmaceutically acceptable salt, hydrate, solvate, crystal form, diastereomer, prodrug, or mixture thereof according to claim 1, and at least one <u>vehicle chosen from</u> pharmaceutically acceptable carriers and or excipients.
- 16. (Currently Amended) A method of treating a kinase-implicated condition in a mammal, comprising administering to the mammal a therapeutically effective amount of at least one chemical entity of claim 21 a compound, pharmaceutically acceptable salt, hydrate, solvate, crystal form, diastereomer, prodrug, or mixture thereof according to claim 1.
- 17. (Original) The method of claim 16 wherein the mammal is a human.
- 18. (Currently Amended) The method of claim 16 wherein the mammal is chosen from dogs and cats a dog or cat.
- 19. (Original) The method of claim 16 wherein the mammal is a livestock animal.

- 20. (Currently Amended) A method for identifying a kinase, comprising contacting an organism, cell, or preparation comprising the kinase with <u>at least one chemical entity of claim 21 a compound or salt according to claim 1</u>, and detecting modulation of an activity of the kinase.
- 21. (New) At least one chemical entity chosen from compounds of Formula 1:



and pharmaceutically acceptable salts, hydrates, solvates, crystal forms, diastereomers, and prodrugs thereof, wherein

R₁ and R₂ are chosen from

hydrogen,

straight chain (C₁-C₇) alkyl,

branched chain (C₁-C₇)alkyl, in which the branched alkyl chains are allowed to also form a 3-7 member ring chosen from heteroalkyl and alkyl rings,

(cyclo(C₃-C₆)alkyl)methyl,

(C₁-C₆)perhaloalkyl,

 (C_1-C_6) alkoxy,

 (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy,

sulfonamido,

mono- $((C_1-C_6)alkyl)amino,$

di((C₁-C₆)alkyl)amino,

mono-((C_1 - C_6)alkyl)amino(C_1 - C_6)alkyl,

 $di((C_1\hbox{-} C_6)alkyl)amino(C_1\hbox{-} C_6)alkyl,$

phenyl,

substituted phenyl chosen from mono-, di-, and tri-substituted phenyl wherein the substitutents are independently chosen from

hydroxy,
nitro,
cyano,
amino,
halo,
(C₁-C₆)alkyl,
(C₁-C₆)perhaloalkyl,
(C₁-C₆)alkoxy,
(C₁-C₆)alkyloxy-(C₁-C₆)alkoxy,
mono-((C₁-C₆)alkyl)amino,
di((C₁-C₆)alkyl)amino,
mono-((C₁-C₆)alkyl)amino(C₁-C₆)alkyl,
di((C₁-C₆)alkyl)amino(C₁-C₆)alkyl,
amino(C₁-C₆)alkyl,
benzamido,

substituted benzamido chosen from mono-, di-, and tri-substituted benzamido and wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, and (C₁-C₆)alkoxy,

benzenesulfonamido,

substituted benzenesulfonamido chosen from mono-, di-, and trisubstituted benzenesulfonamido wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, and (C₁-C₆)alkoxy,

heteroaryl,

substituted heteroaryl chosen from mono-, di-, and trisubstituted heteroaryl wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁-C₆)alkoxy, (C₁-C₆)alkyloxy-(C₁-C₆)alkoxy, mono-((C₁-C₆)alkyl)amino, di((C₁-C₆)alkyl)amino,

mono-((C_1 - C_6)alkyl)amino(C_1 - C_6)alkyl mono-, and di((C_1 - C_6)alkyl)amino(C_1 - C_6)alkyl,

benzylamino(C₁-C₆)alkyl,

dibenzylamino(C₁-C₆)alkyl,

substituted benzylamino(C₁-C₆)alkyl chosen from mono-, di-, and trisubstituted benzylamino(C₁-C₆)alkyl wherein the substituents on the benzyl are independently chosen from hydroxy, nitro, cyano, amino, and halo,

substituted dibenzylamino(C₁-C₆)alkyl chosen from mono-, di-, and trisubstituted dibenzylamino(C₁-C₆)alkyl wherein the substituents on the benzyl are independently chosen from hydroxy, nitro, cyano, amino, and halo,

amino(C₁-C₆)alkyl, and

heteroaryl linked to the phenyl by a group chosen from ether, sulfide, (C₁-C₃)carbonyl, and secondary amino;

benzyl,

substituted benzyl chosen from mono-, di-, and tri-substituted benzyl wherein the substitutents are independently chosen from

hydroxy,

nitro,

cyano,

amino,

halo,

 (C_1-C_6) alkyl,

(C₁-C₆)perhaloalkyl,

 (C_1-C_6) alkoxy,

 (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy,

mono- $((C_1-C_6)alkyl)amino,$

 $di((C_1-C_6)alkyl)amino,$

mono- $((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,$

 $di((C_1-C_6)alkyl)amino(C_1-C_6)alkyl$,

amino(C₁-C₆)alkyl,

benzamido.

substituted benzamido chosen from mono-, di-, and tri-substituted benzamido and wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, and (C₁-C₆)alkoxy,

benzenesulfonamido,

substituted benzenesulfonamido chosen from mono-, di-, and trisubstituted benzenesulfonamido wherein the substituents
are independently chosen from hydroxy, nitro, cyano, amino,
halo, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, and (C₁-C₆)alkoxy,
heteroaryl,

substituted heteroaryl chosen from mono-, di-, and trisubstituted heteroaryl wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, (C_1-C_6) alkyl, (C_1-C_6) perhaloalkyl, (C_1-C_6) alkoxy, (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy, mono- $((C_1-C_6)$ alkyl)amino, di $((C_1-C_6)$ alkyl)amino, mono- $((C_1-C_6)$ alkyl)amino (C_1-C_6) alkyl,

benzylamino(C₁-C₆)alkyl,

dibenzylamino(C₁-C₆)alkyl,

- substituted benzylamino(C₁-C₆)alkyl chosen from mono-, di-, and trisubstituted benzylamino(C₁-C₆)alkyl wherein the substituents on the benzyl are independently chosen from hydroxy, nitro, cyano, amino, and halo,
- substituted dibenzylamino(C_1 - C_6)alkyl chosen from mono-, di-, and trisubstituted dibenzylamino(C_1 - C_6)alkyl wherein the substituents on the benzyl are independently chosen from hydroxy, nitro, cyano, amino, and halo,

amino(C₁-C₆)alkyl, and

heteroaryl linked to the benzyl by a group chosen from ether, sulfide, (C₁-C₃)carbonyl, and secondary amino;

heteroaryl,

substituted heteroaryl chosen from mono-, di-, and tri-substituted heteroaryl wherein the substitutents are independently chosen from

hydroxy,

nitro,

cyano,

amino,

halo,

(C₁-C₆)alkyl,

(C₁-C₆)perhaloalkyl,

 (C_1-C_6) alkoxy,

 (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy,

mono-((C₁-C₆)alkyl)amino,

di((C₁-C₆)alkyl)amino,

mono- $((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,$

 $di((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,$

amino(C₁-C₆)alkyl,

benzamido,

substituted benzamido chosen from mono-, di-, and tri-substituted benzamido and wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, and (C₁-C₆)alkoxy,

benzenesulfonamido,

substituted benzenesulfonamido chosen from mono-, di-, and trisubstituted benzenesulfonamido wherein the substituents
are independently chosen from hydroxy, nitro, cyano, amino,
halo, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, and (C₁-C₆)alkoxy,
heteroaryl,

substituted heteroaryl chosen from mono-, di-, and trisubstituted heteroaryl wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, (C_1-C_6) alkyl, (C_1-C_6) perhaloalkyl, (C_1-C_6) alkoxy, (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy, mono- $((C_1-C_6)$ alkyl)amino, di $((C_1-C_6)$ alkyl)amino, mono- $((C_1-C_6)$ alkyl)amino (C_1-C_6) alkyl,

benzylamino(C₁-C₆)alkyl,

dibenzylamino(C₁-C₆)alkyl,

substituted benzylamino(C₁-C₆)alkyl chosen from mono-, di-, and trisubstituted benzylamino(C₁-C₆)alkyl wherein the substituents on the benzyl are independently chosen from hydroxy, nitro, cyano, amino, and halo,

substituted dibenzylamino(C₁-C₆)alkyl chosen from mono-, di-, and trisubstituted dibenzylamino(C₁-C₆)alkyl wherein the substituents on the benzyl are independently chosen from hydroxy, nitro, cyano, amino, and halo,

amino(C₁-C₆)alkyl, and

heteroaryl linked to the heteroaryl by a group chosen from ether, sulfide, (C₁-C₃)carbonyl, and secondary amino;

heteroaryloxyphenyl,

substituted heteroaryloxyphenyl chosen from mono-, di-, and trisubstituted heteroaryloxyphenyl wherein the substituents are
independently chosen from hydroxy, nitro, cyano, amino, halo,
sulfonamido, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁-C₆)alkoxy, (C₁C₆)alkyloxy-(C₁-C₆)alkoxy, mono-((C₁-C₆)alkyl)amino, di((C₁C₆)alkyl)amino, and amino(C₁-C₆)alkyl,

phenyloxyphenyl,

substituted phenyloxyphenyl chosen from mono-, di-, and tri-substituted phenyloxyphenyl I wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, sulfonamido, (C₁-

 C_6)alkyl, (C_1 - C_6)perhaloalkyl, (C_1 - C_6)alkoxy, (C_1 - C_6)alkyloxy-(C_1 - C_6)alkoxy, mono-((C_1 - C_6)alkyl)amino, di((C_1 - C_6)alkyl)amino, and amino(C_1 - C_6)alkyl,

4-phenyl-1-piperazinyl,

substituted 4-phenyl-1-piperazinyl chosen from mono-, di-, and trisubstituted 4-phenyl-1-piperazinyl wherein the substituents on the phenyl ring are chosen from hydroxy, nitro, cyano, amino, halo, sulfonamido, (C_1-C_6) alkyl, (C_1-C_6) perhaloalkyl, (C_1-C_6) alkoxy, (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy, mono- $((C_1-C_6)$ alkyl)amino, di $((C_1-C_6)$ alkyl)amino, mono- $((C_1-C_6)$ alkyl)amino (C_1-C_6) alkyl), and di $((C_1-C_6)$ alkyl)amino (C_1-C_6) alkyl),

4-heteroaryl-1-piperazinyl, and

substituted 4-heteroaryl-1-piperazinyl chosen from mono-, di-, and tri-substituted 4-heteroaryl-1-piperazinyl wherein the substituents on the heteroaryl ring are chosen from hydroxy, nitro, cyano, amino, halo, sulfonamido, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁-C₆)alkoxy, (C₁-C₆)alkyloxy-(C₁-C₆)alkoxy, mono-((C₁-C₆)alkyl)amino, di((C₁-C₆)alkyl)amino, mono-((C₁-C₆)alkyl)amino(C₁-C₆)alkyl), and di((C₁-C₆)alkyl)amino(C₁-C₆)alkyl);

provided that only one of R₁ and R₂ is chosen from hydrogen, straight chain (C₁-C₇) alkyl, and branched chain (C₁-C₇)alkyl, in which the branched alkyl chains are allowed to also form a 3-7 member ring chosen from heteroalkyl and alkyl rings;

 Z_1 and Z_2 are independently chosen from

$$-N-$$
, $-O-$, $-X-$, $-N-X-$, $-N-X-$, $-N-X-$,

wherein

X is chosen from C and S, and

R₄–R₁₀ are independently chosen from

hydrogen, straight chain (C₁-C₆)alkyl, branched chain (C₁-C₆)alkyl, phenyl,

substituted phenyl chosen from mono-, di-, and tri-substituted phenyl wherein the substituents are chosen from hydroxy, nitro, cyano, amino, halo, (C_1-C_6) alkyl, (C_1-C_6) perhaloalkyl, (C_1-C_6) alkoxy, (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy, mono- $((C_1-C_6)$ alkyl)amino, di $((C_1-C_6)$ alkyl)amino, and amino (C_1-C_6) alkyl,

heteroaryl, and

substituted heteroaryl chosen from mono-, di-, and tri-substituted heteroaryl wherein the substituents are chosen from hydroxy, nitro, cyano, amino, halo, (C_1-C_6) alkyl, (C_1-C_6) alkoxy, (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy, mono- $((C_1-C_6)$ alkyl)amino, di $((C_1-C_6)$ alkyl)amino, and amino (C_1-C_6) alkyl;

each m is independently chosen from 0 and 1; and W is a monocyclic ring chosen from

$$R_{12}R_{11}N \longrightarrow R_{12}R_{11}N \longrightarrow R_{12}R_{11}$$

wherein

R₁₁ and R₁₂ are independently chosen from

hydrogen,

straight chain (C₁-C₇)alkyl,

branched chain (C₁-C₇)alkyl, in which the branched alkyl chains are allowed to also form a 3-7 membered ring chosen from heteroalkyl and alkyl rings,

 $(cyclo(C_3-C_6)alkyl)methyl,$

(C₁-C₆)perhaloalkyl,

sulfonamido,

mono-((C₁-C₆)alkyl)amino,

di((C₁-C₆)alkyl)amino,

 $mono-((C_1-C_6)alkyl)amino(C_1-C_6 alkyl),$

 $di((C_1-C_6)alkyl)amino(C_1-C_6 alkyl),$

phenyl,

substituted phenyl chosen from mono-, di-, and tri-substituted phenyl wherein the substituents are chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl,

 $(C_1-C_6)alkoxy, \ (C_1-C_6)alkyloxy-(C_1-C_6)alkoxy, \ mono-((C_1-C_6)alkyl)amino, \ di((C_1-C_6)alkyl)amino, \ mono-((C_1-C_6)alkyl)amino(C_1-C_6)alkyl)amino(C_1-C_6)alkyl)amino(C_1-C_6)alkyl),$

benzyl,

substituted benzyl chosen from mono-, di-, and tri-substituted benzyl wherein the substituents are chosen from hydroxy, nitro, cyano, amino, halo, (C_1-C_6) alkyl, (C_1-C_6) perhaloalkyl, (C_1-C_6) alkoxy, (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy, mono- $((C_1-C_6)$ alkyl)amino, di $((C_1-C_6)$ alkyl)amino, mono- $((C_1-C_6)$ alkyl)amino (C_1-C_6) alkyl, di $((C_1-C_6)$ alkyl)amino (C_1-C_6) alkyl, and amino $((C_1-C_6)$ alkyl),

heteroaryl,

substituted heteroaryl chosen from mono-, di-, and tri-substituted heteroaryl wherein the substituents are chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁-C₆)alkoxy, (C₁-C₆)alkyloxy-(C₁-C₆)alkoxy, mono-((C₁-C₆)alkyl)amino, di((C₁-C₆)alkyl)amino, mono-((C₁-C₆)alkyl)amino(C₁-C₆)alkyl, di((C₁-C₆)alkyl)amino(C₁-C₆)alkyl, and amino((C₁-C₆)alkyl),

substituted heteroaryloxyphenyl chosen from mono-, di-, and trisubstituted heteroaryloxyphenyl wherein the substituents are
independently chosen from hydroxy, nitro, cyano, amino,
halo, sulfonamido, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁C₆)alkoxy, (C₁-C₆)alkyloxy-(C₁-C₆)alkoxy, mono-((C₁C₆)alkyl)amino, di((C₁-C₆)alkyl)amino, and amino(C₁-C₆
alkyl),

phenoxyphenyl,

heteroaryloxyphenyl,

substituted phenoxyphenyl chosen from mono-, di-, and trisubstituted phenoxyphenyl wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, sulfonamido, (C_1-C_6) alkyl, (C_1-C_6) perhaloalkyl, (C_1-C_6) alkoxy, (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy, mono- $((C_1-C_6)$ alkyl)amino, di $((C_1-C_6)$ alkyl)amino, and amino (C_1-C_6) alkyl),

phenyl-piperazinyl,

substituted phenyl-piperazinyl chosen from mono-, di-, and trisubstituted phenyl-piperazinyl wherein the substituents on the phenyl ring are independently chosen from hydroxy, nitro, cyano, amino, halo, sulfonamido, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁-C₆)alkoxy, (C₁-C₆)alkyloxy(C₁-C₆)alkoxy, mono-((C₁-C₆)alkyl)amino, di((C₁-C₆)alkyl)amino, mono-(C₁-C₆ alkyl)amino(C₁-C₆ alkyl), and di(C₁-C₆ alkyl)amino(C₁-C₆ alkyl),

heteroaryl-piperazinyl, and

substituted heteroaryl-piperazinyl chosen from mono-, di-, and trisubstituted heteroaryl-piperazinyl wherein the substituents on the heteroaryl ring are independently chosen from hydroxy, nitro, cyano, amino, halo, sulfonamido, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁-C₆)alkoxy, (C₁-C₆)alkyloxy(C₁-C₆)alkoxy, mono-((C₁-C₆)alkyl)amino, di((C₁-C₆)alkyl)amino, mono-(C₁-C₆ alkyl)amino(C₁-C₆ alkyl).

22. (New) At least one chemical entity of claim 21, wherein R_1 and R_2 are chosen from

hydrogen,

straight chain (C₁-C₇)alkyl, branched chain (C₁-C₇)alkyl, (cyclo(C₃-C₆)alkyl)methyl, (C₁-C₆)perhaloalkyl,

```
(C_1-C_6)alkoxy,
phenyl,
benzyl,
heteroaryl,
substituted phenyl chosen from mono-, di-, and tri-substituted phenyl wherein the
        substituents are chosen from
        hydroxy,
        nitro,
        cyano,
        amino,
        halo,
        (C_1-C_6)alkyl,
        (C<sub>1</sub>-C<sub>6</sub>)perhaloalkyl,
        (C<sub>1</sub>-C<sub>6</sub>)alkoxy,
        (C_1-C_6)alkyloxy-(C_1-C_6)alkoxy,
        mono-((C<sub>1</sub>-C<sub>6</sub>)alkyl)amino,
        di((C_1-C_6)alkyl)amino,
        mono-((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,
        di((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,
        amino(C<sub>1</sub>-C<sub>6</sub>)alkyl,
        benzamido,
        substituted benzamido chosen from mono-, di-, and tri-substituted
                benzamido wherein the substituents are chosen from hydroxy,
                nitro, cyano, amino, halo, (C_1-C_6)alkyl, and (C_1-C_6)alkoxy,
        benzenesulfonamido,
        substituted benzenesulfonamido chosen from mono-, di-, and tri-
                substituted benzenesulfonamido wherein the substituents are
                chosen from hydroxy, nitro, cyano, amino, halo, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-
                C<sub>6</sub>)perhaloalkyl, and (C<sub>1</sub>-C<sub>6</sub>)alkoxy,
         heteroaryl,
```

```
substituted heteroaryl chosen from mono-, di-, and tri-substituted
                                     heteroaryl wherein the substituents are chosen from hydroxy, nitro,
                                     cyano, amino, halo, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-C<sub>6</sub>)perhaloalkyl, (C<sub>1</sub>-
                                     C_6)alkoxy, (C_1-C_6)alkyloxy-(C_1-C_6)alkoxy, mono-
                                      ((C_1-C_6)alkyl)amino, di((C_1-C_6)alkyl)amino, mono-((C_1-C_6)alkyl)amino, mono-((C
                                      C_6)alkyl)amino(C_1-C_6)alkyl, and di((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,
                  benzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl,
                  dibenzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl,
                  substituted benzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl chosen from mono-, di-, and tri-
                                      substituted benzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl wherein the substituents on
                                      the benzyl are chosen from hydroxy, nitro, cyano, amino, and halo,
                  substituted dibenzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl chosen from mono-, di-, and tri-
                                      substituted dibenzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl wherein the substituents on
                                      each of the benzyls are independently chosen from hydroxy, nitro,
                                      cyano, amino, and halo,
                  amino(C<sub>1</sub>-C<sub>6</sub>)alkyl, and
                  heteroaryl linked to the phenyl by a group chosen from ether, sulfide, (C<sub>1</sub>-
                                      C<sub>3</sub>)carbonyl, and secondary amino,
substituted benzyl chosen from mono-, di-, and tri-substituted benzyl wherein the
                  substituents are chosen from
                  hydroxy,
                   nitro,
                   cyano,
                   amino,
                   halo,
                   (C_1-C_6)alkyl,
                   (C<sub>1</sub>-C<sub>6</sub>)perhaloalkyl,
                   (C_1-C_6)alkoxy,
                   (C_1-C_6)alkyloxy-(C_1-C_6)alkoxy,
                   mono-((C_1-C_6)alkyl)amino,
                   di((C<sub>1</sub>-C<sub>6</sub>)alkyl)amino,
```

mono- $((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,$ di $((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,$ amino $(C_1-C_6)alkyl,$

benzamido,

substituted benzamido chosen from mono-, di-, and tri-substituted benzamido wherein the substituents are chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, and (C₁-C₆)alkoxy, benzenesulfonamido,

substituted benzenesulfonamido chosen from mono-, di-, and trisubstituted benzenesulfonamido wherein the substituents are
chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, (C₁C₆)perhaloalkyl, and (C₁-C₆)alkoxy,

heteroaryl,

substituted heteroaryl chosen from mono-, di-, and tri-substituted heteroaryl wherein the substituents are chosen from hydroxy, nitro, cyano, amino, halo, (C_1-C_6) alkyl, (C_1-C_6) perhaloalkyl, (C_1-C_6) alkoxy, (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy, mono- $((C_1-C_6)$ alkyl)amino, di $((C_1-C_6)$ alkyl)amino, mono- $((C_1-C_6)$ alkyl)amino (C_1-C_6) alkyl, and di $((C_1-C_6)$ alkyl)amino (C_1-C_6) alkyl, benzylamino (C_1-C_6) alkyl,

dibenzylamino(C₁-C₆)alkyl,

substituted benzylamino(C_1 - C_6)alkyl chosen from mono-, di-, and trisubstituted benzylamino(C_1 - C_6)alkyl wherein the substituents on the benzyl are chosen from hydroxy, nitro, cyano, amino, and halo,

substituted dibenzylamino(C_1 - C_6)alkyl chosen from mono-, di-, and trisubstituted dibenzylamino(C_1 - C_6)alkyl wherein the substituents on each of the benzyls are independently chosen from hydroxy, nitro, cyano, amino, and halo,

amino(C₁-C₆)alkyl, and

heteroaryl linked to the benzyl by a group chosen from ether, sulfide, (C₁-C₃)carbonyl, and secondary amino,

substituted heteroaryl chosen from mono-, di-, and tri-substituted heteroaryl wherein the substituents are chosen from hydroxy, nitro, cyano, amino, halo, (C_1-C_6) alkyl, (C₁-C₆)perhaloalkyl, (C₁-C₆)alkoxy, (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy, mono-((C₁-C₆)alkyl)amino, $di((C_1-C_6)alkyl)amino,$ mono- $((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,$ $di((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,$ amino(C₁-C₆)alkyl, benzamido, substituted benzamido chosen from mono-, di-, and tri-substituted benzamido wherein the substituents are chosen from hydroxy, nitro, cyano, amino, halo, (C_1-C_6) alkyl, and (C_1-C_6) alkoxy, benzenesulfonamido, substituted benzenesulfonamido chosen from mono-, di-, and trisubstituted benzenesulfonamido wherein the substituents are chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, and (C₁-C₆)alkoxy, heteroaryl, substituted heteroaryl chosen from mono-, di-, and tri-substituted heteroaryl wherein the substituents are chosen from hydroxy, nitro,

 C_6)alkoxy, (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy, mono-

cyano, amino, halo, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁-

 $\label{eq:continuous} $$((C_1-C_6)alkyl)amino, mono-((C_1-C_6)alkyl)amino(C_1-C_6)alkyl)amino(C_1-C_6)alkyl, and di((C_1-C_6)alkyl)amino(C_1-C_6)alkyl, benzylamino(C_1-C_6)alkyl,$

substituted benzylamino(C_1 - C_6)alkyl chosen from mono-, di-, and trisubstituted benzylamino(C_1 - C_6)alkyl wherein the substituents on

the benzyl are chosen from hydroxy, nitro, cyano, amino, and halo,

substituted dibenzylamino(C_1 - C_6)alkyl chosen from mono-, di-, and trisubstituted dibenzylamino(C_1 - C_6)alkyl wherein the substituents on each of the benzyls are independently chosen from hydroxy, nitro, cyano, amino, and halo,

amino(C₁-C₆)alkyl, and

dibenzylamino(C₁-C₆)alkyl,

heteroaryl linked to the heteroaryl by a group chosen from ether, sulfide, (C₁-C₃)carbonyl, and secondary amino,

heteroaryloxyphenyl,

substituted heteroaryloxyphenyl chosen from mono-, di-, and tri-substituted heteroaryloxyphenyl wherein the substituents are independently chosen hydroxy, nitro, cyano, amino, halo, sulfonamido, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁-C₆)alkoxy, (C₁-C₆)alkyloxy-(C₁-C₆)alkoxy, mono-((C₁-C₆)alkyl)amino, di((C₁-C₆)alkyl)amino, and amino(C₁-C₆)alkyl, phenyloxyphenyl,

substituted phenyloxyphenyl chosen from mono-, di-, and tri-substituted phenyloxyphenyl wherein the substituents are independently chosen hydroxy, nitro, cyano, amino, halo, sulfonamido, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁-C₆)alkoxy, (C₁-C₆)alkyloxy-(C₁-C₆)alkoxy, mono-((C₁-C₆)alkyl)amino, di((C₁-C₆)alkyl)amino, and amino(C₁-C₆)alkyl,

4-phenyl-1-piperazinyl,

substituted 4-phenyl-1-piperazinyl chosen from mono-, di-, and tri-substituted 4-phenyl-1-piperazinyl wherein the substituents on the phenyl ring are chosen from hydroxy, nitro, cyano, amino, halo, sulfonamido, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁-C₆)alkoxy, and (C₁-C₆)alkyloxy-(C₁-C₆)alkoxy,

4-heteroaryl-1-piperazinyl, and

substituted 4-heteroaryl-1-piperazinyl chosen from mono-, di-, and tri-substituted 4-heteroaryl-1-piperazinyl wherein the substituents on the heteroaryl ring are chosen from hydroxy, nitro, cyano, amino, halo, sulfonamido, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁-C₆)alkoxy, and (C₁-C₆)alkyloxy-(C₁-C₆)alkoxy;

provided that only one of R₁ and R₂ is chosen from hydrogen, straight chain (C₁-C₇)alkyl, and branched chain (C₁-C₇)alkyl;

Z₁ and Z₂ are independently chosen from

$$-N-$$
 , $-O-$, $-X-$, $-S-$, $-N-X-$, $-N-X-$

$$\begin{array}{c} O \\ \parallel \\ -X - N - \\ \parallel \\ R_6 \end{array} \ , \begin{array}{c} O \\ \parallel \\ -N - S - \\ \parallel \\ N_7 \end{array} \ , \begin{array}{c} O \\ \parallel \\ -N - C - N - \\ \parallel \\ N_{8} \end{array} \ , \begin{array}{c} O \\ \parallel \\ -N - C - N - \\ \parallel \\ R_{9} \end{array} \ , \begin{array}{c} O \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ \parallel \\ -N - C - N - \\ -N - C - N -$$

wherein

X is C; and

R₄–R₁₀ are independently chosen from

hydrogen,

straight chain (C₁-C₆)alkyl,

branched chain (C₁-C₆)alkyl,

phenyl,

substituted phenyl chosen from mono-, di-, and tri-substituted phenyl wherein the substituents are chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, and (C₁-C₆)perhaloalkyl,

heteroaryl, and

substituted heteroaryl chosen from mono-, di-, and tri-substituted heteroaryl wherein the substituents are chosen from hydroxy, nitro, cyano, amino, and halo;

each m is independently chosen from 0 and 1; and

W is a monocyclic ring chosen from

$$R_{12}R_{11}N$$
 $R_{12}R_{11}N$
 $R_{12}R_{11}$

wherein

R₁₁ and R₁₂ are independently chosen from

hydrogen,

straight chain (C₁-C₇)alkyl,

branched chain (C₁-C₇)alkyl, in which the branched alkyl chains are allowed to also form a 3-7 member ring chosen from heteroalkyl and alkyl rings,

(cyclo(C₃-C₆)alkyl)methyl,

(C₁-C₆)perhaloalkyl,

mono-((C₁-C₆)alkyl)amino,

di((C₁-C₆)alkyl)amino,

mono- $((C_1-C_6)alkyl)amino(C_1-C_6 alkyl),$

 $di((C_1-C_6)alkyl)amino(C_1-C_6 alkyl),$

phenyl,

benzyl,

heteroaryl,

substituted phenyl chosen from mono-, di-, and tri-substituted phenyl wherein the substitutents are chosen from hydroxy, nitro, cyano, amino, halo, (C_1-C_6) alkyl, (C_1-C_6) perhaloalkyl, (C_1-C_6) alkoxy, (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy, mono- $((C_1-C_6)$ alkyl)amino, di $((C_1-C_6)$ alkyl)amino, mono- $((C_1-C_6)$ alkyl)amino (C_1-C_6) alkyl, di $((C_1-C_6)$ alkyl)amino $((C_1-C_6)$ alkyl),

substituted benzyl chosen from mono-, di-, and tri-substituted benzyl wherein the substitutents are chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁-C₆)alkoxy, (C₁-C₆)alkyloxy-(C₁-C₆)alkoxy, mono-((C₁-C₆)alkyl)amino, di((C₁-C₆)alkyl)amino, mono-((C₁-C₆)alkyl)amino(C₁-C₆)alkyl, di((C₁-C₆)alkyl)amino(C₁-C₆)alkyl),

substituted heteroaryl chosen from mono-, di-, and tri-substituted heteroaryl wherein the substitutents are chosen from hydroxy, nitro, cyano, amino, halo, (C_1-C_6) alkyl, (C_1-C_6) perhaloalkyl, (C_1-C_6) alkoxy, (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy, mono- $((C_1-C_6)$ alkyl)amino, di $((C_1-C_6)$ alkyl)amino, mono- $((C_1-C_6)$ alkyl)amino (C_1-C_6) alkyl, di $((C_1-C_6)$ alkyl)amino $((C_1-C_6)$ alkyl), and amino $((C_1-C_6)$ alkyl),

heteroaryloxyphenyl,

phenyloxyphenyl,

substituted heteroaryloxyphenyl chosen from mono-, di-, and trisubstituted heteroaryloxyphenyl wherein the substitutents are chosen from hydroxy, nitro, cyano, amino, halo, sulfonamido, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, and (C₁-C₆)alkoxy,

substituted phenyloxyphenyl chosen from mono-, di-, and tri-substituted phenyloxyphenyl wherein the substitutents are chosen from

hydroxy, nitro, cyano, amino, halo, sulfonamido, (C_1-C_6) alkyl, (C_1-C_6) perhaloalkyl, and (C_1-C_6) alkoxy,

phenyl-piperazinyl,

heteroaryl-piperazinyl,

substituted phenyl-piperazinyl chosen from mono-, di-, and tri-substituted phenyl-piperazinyl wherein the substituents on the phenyl are chosen from hydroxy, nitro, cyano, amino, halo, and di(C₁-C₆ alkyl), and

substituted heteroaryl-piperazinyl,chosen from mono-, di-, and trisubstituted heteroaryl-piperazinyl,wherein the substituents on the heteroaryl are chosen from hydroxy, nitro, cyano, amino, halo, and di(C₁-C₆ alkyl)amino(C₁-C₆ alkyl).

23. (New) At least one chemical entity of claim 21, wherein R_1 and R_2 are chosen from

hydrogen,

straight chain (C₁-C₇)alkyl,

branched chain (C₁-C₇)alkyl;

phenyl,

benzyl,

heteroaryl,

substituted phenyl chosen from mono-, di-, and tri-substituted phenyl wherein the substituents are chosen from

hydroxy,

nitro,

cyano,

amino,

halo,

 (C_1-C_6) alkyl,

(C₁-C₆)perfluoroalkyl,

 (C_1-C_6) alkoxy,

```
(C_1-C_6)alkyloxy-(C_1-C_6)alkoxy,
mono-((C_1-C_6)alkyl)amino,
di((C_1-C_6)alkyl)amino,
mono-((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,
di((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,
amino(C<sub>1</sub>-C<sub>6</sub>)alkyl,
benzamido.
substituted benzamido chosen from mono-, di-, and tri-substituted
        benzamido wherein the substituents are chosen from hydroxy,
        nitro, cyano, amino, halo, (C_1-C_6)alkyl, and (C_1-C_6)alkoxy,
benzenesulfonamido,
substituted benzensulfonamido chosen from mono-, di-, and tri-substituted
        benzenesulfonamido wherein the substituents are chosen from
        hydroxy, nitro, cyano, amino, halo, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-
        C<sub>6</sub>)perhaloalkyl, and (C<sub>1</sub>-C<sub>6</sub>)alkoxy,
heteroaryl,
substituted heteroaryl chosen from mono-, di-, and trisubstituted
        heteroaryl wherein the substituents are chosen from
        hydroxy,
        nitro,
        cyano,
        amino,
        halo,
        (C_1-C_6)alkyl,
        (C<sub>1</sub>-C<sub>6</sub>)perfluoroalkyl,
        (C_1-C_6)alkoxy,
        (C_1-C_6)alkyloxy-(C_1-C_6)alkoxy,
        mono-((C_1-C_6)alkyl)amino,
        di((C<sub>1</sub>-C<sub>6</sub>)alkyl)amino,
        mono-((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,
        di((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,
```

```
dibenzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl,
               substituted benzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl chosen from mono-, di-, and
                       tri-substituted benzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl wherein the
                       substituents on the benzyl are chosen from hydroxy, nitro,
                       cyano, amino, and halo,
               substituted dibenzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl chosen from mono-, di-, and
                       tri-substituted dibenzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl wherein the
                       substituents on each of the benzyls are independently
                       chosen from hydroxy, nitro, cyano, amino, and halo,
               amino(C<sub>1</sub>-C<sub>6</sub>)alkyl, and
      heteroaryl linked to the phenyl by a group chosen from ether, sulfide, (C<sub>1</sub>-
               C<sub>3</sub>)carbonyl, and secondary amino,
substituted benzyl chosen from mono-, di-, and tri-substituted benzyl wherein
      the substituents are chosen from
      hydroxy,
      nitro,
      cyano,
      amino,
      halo,
      (C_1-C_6)alkyl,
      (C<sub>1</sub>-C<sub>6</sub>)perfluoroalkyl,
      (C_1-C_6)alkoxy,
      (C_1-C_6)alkyloxy-(C_1-C_6)alkoxy,
      mono-((C<sub>1</sub>-C<sub>6</sub>)alkyl)amino,
      di((C_1-C_6)alkyl)amino,
      mono-((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,
      di((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,
      amino(C<sub>1</sub>-C<sub>6</sub>)alkyl,
      benzamido,
```

benzylamino(C₁-C₆)alkyl,

```
substituted benzamido chosen from mono-, di-, and tri-substituted
        benzamido wherein the substituents are chosen from hydroxy,
        nitro, cyano, amino, halo, (C<sub>1</sub>-C<sub>6</sub>)alkyl, and (C<sub>1</sub>-C<sub>6</sub>)alkoxy,
benzenesulfonamido.
substituted benzensulfonamido chosen from mono-, di-, and tri-substituted
        benzenesulfonamido wherein the substituents are chosen from
        hydroxy, nitro, cyano, amino, halo, (C<sub>1</sub>-C<sub>6</sub>)alkyl, (C<sub>1</sub>-
        C<sub>6</sub>)perhaloalkyl, and (C<sub>1</sub>-C<sub>6</sub>)alkoxy,
heteroaryl,
substituted heteroaryl chosen from mono-, di-, and trisubstituted
        heteroaryl wherein the substituents are chosen from
        hydroxy,
        nitro,
        cyano,
        amino.
        halo,
        (C_1-C_6)alkyl,
        (C<sub>1</sub>-C<sub>6</sub>)perfluoroalkyl,
        (C_1-C_6)alkoxy,
        (C_1-C_6)alkyloxy-(C_1-C_6)alkoxy,
        mono-((C<sub>1</sub>-C<sub>6</sub>)alkyl)amino,
        di((C_1-C_6)alkyl)amino,
        mono-((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,
        di((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,
         benzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl,
        dibenzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl,
         substituted benzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl chosen from mono-, di-, and
                 tri-substituted benzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl wherein the
                 substituents on the benzyl are chosen from hydroxy, nitro,
```

cyano, amino, and halo,

substituted dibenzylamino(C₁-C₆)alkyl chosen from mono-, di-, and tri-substituted dibenzylamino(C₁-C₆)alkyl wherein the substituents on each of the benzyls are independently chosen from hydroxy, nitro, cyano, amino, and halo, amino(C₁-C₆)alkyl, and heteroaryl linked to the benzyl by a group chosen from ether, sulfide, (C₁-C₃)carbonyl, and secondary amino, substituted heteroaryl chosen from mono-, di-, and tri-substituted heteroaryl wherein the substituents are chosen from hydroxy, nitro, cyano, amino, halo, (C_1-C_6) alkyl, (C₁-C₆)perfluoroalkyl, (C_1-C_6) alkoxy, (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy, mono- $((C_1-C_6)alkyl)amino,$ di((C₁-C₆)alkyl)amino, mono- $((C_1-C_6)alkyl)amino(C_1-C_6)alkyl$, $di((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,$ amino(C₁-C₆)alkyl, benzamido. substituted benzamido chosen from mono-, di-, and tri-substituted benzamido wherein the substituents are chosen from hydroxy, nitro, cyano, amino, halo, (C_1-C_6) alkyl, and (C_1-C_6) alkoxy, benzenesulfonamido,

substituted benzensulfonamido chosen from mono-, di-, and tri-substituted

benzenesulfonamido wherein the substituents are chosen from

```
hydroxy, nitro, cyano, amino, halo, (C_1-C_6)alkyl, (C_1-C_6)perhaloalkyl, and (C_1-C_6)alkoxy,
```

heteroaryl,

substituted heteroaryl chosen from mono-, di-, and trisubstituted heteroaryl wherein the substituents are chosen from hydroxy,

nitro,

cyano,

amino,

halo,

 (C_1-C_6) alkyl,

(C₁-C₆)perfluoroalkyl,

 (C_1-C_6) alkoxy,

 (C_1-C_6) alkyloxy- (C_1-C_6) alkoxy,

mono-((C₁-C₆)alkyl)amino,

di((C₁-C₆)alkyl)amino,

mono- $((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,$

 $di((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,$

benzylamino(C₁-C₆)alkyl,

dibenzylamino(C₁-C₆)alkyl,

substituted benzylamino(C_1 - C_6)alkyl chosen from mono-, di-, and tri-substituted benzylamino(C_1 - C_6)alkyl wherein the substituents on the benzyl are chosen from hydroxy, nitro, cyano, amino, and halo,

substituted dibenzylamino(C₁-C₆)alkyl chosen from mono-, di-, and tri-substituted dibenzylamino(C₁-C₆)alkyl wherein the substituents on each of the benzyls are independently chosen from hydroxy, nitro, cyano, amino, and halo,

amino(C₁-C₆)alkyl, and

heteroaryl linked to the heteroaryl by a group chosen from ether, sulfide, (C₁-C₃)carbonyl, and secondary amino,

heteroaryloxyphenyl,

phenyloxyphenyl,

substituted heteroaryloxyphenyl chosen from mono-, di-, and tri-substituted heteroaryloxyphenyl wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, sulfonamido, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁-C₆)alkoxy, (C₁-C₆)alkyloxy-(C₁-C₆)alkoxy, mono-((C₁-C₆)alkyl)amino, di((C₁-C₆)alkyl)amino, and amino(C₁-C₆)alkyl,

substituted phenyloxyphenyl chosen from mono-, di-, and tri-substituted phenyloxyphenyl wherein the substituents are chosen from hydroxy, nitro, cyano, amino, halo, sulfonamido, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁-C₆)alkoxy, (C₁-C₆)alkyloxy-(C₁-C₆)alkoxy, mono-((C₁-C₆)alkyl)amino, di((C₁-C₆)alkyl)amino, and amino(C₁-C₆)alkyl,

4-phenyl-1-piperazinyl,

4-heteroaryl-1-piperazinyl,

substituted 4-phenyl-1-piperazinyl chosen from mono-, di-, and tri-substituted 4-phenyl-1-piperazinyl wherein the substituents on the phenyl are chosen from hydroxy, nitro, cyano, amino, and halo, and

substituted 4-heteroaryl-1-piperazinyl chosen from mono-, di-, and tri-substituted 4-heteroaryl-1-piperazinyl wherein the substituents on the heteroaryl are independently chosen from hydroxy, nitro, cyano, amino, and halo;

provided that only one of R_1 and R_2 is chosen from hydrogen, straight chain (C_1-C_7) alkyl, and branched chain (C_1-C_7) alkyl;

 Z_1 and Z_2 are each independently chosen from

$$-N-$$
, $-O-$, $-X-$, and $-X-$,

wherein

X is C; and

 R_4 – R_{10} are independently chosen from hydrogen, straight chain (C_1 - C_6)alkyl, and branched chain (C_1 - C_6)alkyl;

each m is independently chosen from 0 and 1; and

W is a monocyclic ring chosen from

$$R_{12}R_{11}N$$
 $R_{12}R_{11}N$
 $R_{12}R_{11}$

wherein

R₁₁ and R₁₂ are independently chosen from

hydrogen,

straight chain (C₁-C₇)alkyl,

branched chain (C₁-C₇)alkyl, in which the branched alkyl chains are allowed to also form a 3-7 member ring chosen from heteroalkyl and alkyl rings;

phenyl,

benzyl,

heteroaryl,

substituted phenyl chosen from mono-, di-, and tri-substituted phenyl wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, (C₁-C₆)perfluoroalkyl, and (C₁-C₆)alkoxy,

substituted benzyl chosen from mono-, di-, and tri-substituted benzyl wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, (C_1-C_6) alkyl, (C_1-C_6) perfluoroalkyl, and (C_1-C_6) alkoxy,

substituted heteroaryl chosen from mono-, di-, and tri-substituted heteroaryl wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, (C₁-C₆)perfluoroalkyl, and (C₁-C₆)alkoxy,

heteroaryloxyphenyl,

```
phenyloxyphenyl,
               substituted heteroaryloxyphenyl chosen from mono-, di-, and tri-
                      substituted heteroaryloxyphenyl wherein the substituents are
                      independently chosen from hydroxy, nitro, cyano, amino, halo,
                      sulfonamido, (C_1-C_6)alkyl, (C_1-C_6)perhaloalkyl, and (C_1-C_6)alkoxy,
                      and
               substituted phenyloxyphenyl chosen from mono-, di-, and tri-substituted
                      phenyloxyphenyl wherein the substituents are independently
                      chosen from hydroxy, nitro, cyano, amino, halo, sulfonamido, (C<sub>1</sub>-
                       C_6)alkyl, (C_1-C_6)perhaloalkyl, and (C_1-C_6)alkoxy.
                      At least one chemical entity of claim 21 wherein
         (New)
R<sub>1</sub> and R<sub>2</sub> is chosen from
       hydrogen,
       phenyl,
       benzyl,
       heteroaryl,
       substituted phenyl chosen from mono-, di-, and tri-substituted phenyl wherein the
               substituents are independently chosen from
               hydroxy,
               nitro,
               cyano,
               amino,
               halo,
               (C_1-C_6)alkyl,
               (C<sub>1</sub>-C<sub>6</sub>)perfluoroalkyl,
               (C<sub>1</sub>-C<sub>6</sub>)alkoxy,
               (C_1-C_6)alkyloxy-(C_1-C_6)alkoxy,
               mono-((C<sub>1</sub>-C<sub>6</sub>)alkyl)amino,
```

24.

 $di((C_1-C_6)alkyl)amino,$

mono- $((C_1-C_6)alkyl)$ amino $(C_1-C_6)alkyl$,

```
di((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,
amino(C_1-C_6)alkyl,
benzamido,
substituted benzamido chosen from mono-, di-, and tri-substituted
        benzamido wherein the substituents are independently chosen from
        hydroxy, nitro, cyano, amino, halo, (C_1-C_6)alkyl, and (C_1-C_6)alkoxy,
benzenesulfonamido.
substituted benzenesulfonamido chosen from mono-, di-, and tri-
        substituted benzenesulfonamido wherein the substituents are
        independently chosen from hydroxy, nitro, cyano, amino, halo, (C<sub>1</sub>-
        C_6)alkyl, (C_1-C_6)perhaloalkyl, and (C_1-C_6)alkoxy,
heteroaryl,
substituted heteroaryl chosen from mono-, di-, and tri-substituted
        heteroaryl wherein the substituents are independently chosen from
        hydroxy,
        nitro,
        cyano,
        amino,
        halo,
        (C_1-C_6)alkyl,
        (C<sub>1</sub>-C<sub>6</sub>)perfluoroalkyl,
        (C_1-C_6)alkoxy,
        (C_1-C_6)alkyloxy-(C_1-C_6)alkoxy,
        mono-((C<sub>1</sub>-C<sub>6</sub>)alkyl)amino,
        di((C_1-C_6)alkyl)amino,
        mono-((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,
        di-((C_1-C_6)alkyl)amino(C_1-C_6)alkyl,
        benzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl,
        dibenzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl,
        substituted benzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl chosen from mono-, di-, and
                tri-substituted benzylamino(C<sub>1</sub>-C<sub>6</sub>)alkyl wherein the
```

substituents are independently chosen from hydroxy, nitro, cyano, amino, and halo,

substituted dibenzylamino(C_1 - C_6)alkyl chosen from mono-, di-, and tri-substituted dibenzylamino(C_1 - C_6)alkyl wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, and halo,

amino(C₁-C₆)alkyl, and

heteroaryl linked to the phenyl by a group chosen from ether, sulfide, (C₁-C₃)carbonyl, and secondary amino,

phenyloxyphenyl, and

substituted phenyloxyphenyl chosen from mono-, di-, and tri-substituted phenyloxyphenyl wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, sulfonamido, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, (C₁-C₆)alkoxy, (C₁-C₆)alkyloxy-(C₁-C₆)alkoxy, mono-((C₁-C₆)alkyl)amino, di((C₁-C₆)alkyl)amino, and amino(C₁-C₆)alkyl;

provided that only one of R₁ and R₂ is hydrogen;

 Z_1 and Z_2 are -NH-;

each m is independently chosen from 0 and 1; and W is a monocyclic ring chosen from

wherein

R₁₁ and R₁₂ are independently chosen from hydrogen, straight chain (C₁-C₇)alkyl,

branched chain (C₁-C₇)alkyl,

phenyl,

benzyl,

heteroaryl,

- substituted phenyl chosen from mono-, di-, and tri-substituted phenyl wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, (C₁-C₆)perfluoroalkyl, and (C₁-C₆)alkoxy,
- substituted benzyl chosen from mono-, di-, and tri-substituted benzyl wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, (C₁-C₆)perfluoroalkyl, and (C₁-C₆)alkoxy,
- substituted heteroaryl chosen from mono-, di-, and tri-substituted heteroaryl wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, (C₁-C₆)alkyl, (C₁-C₆)perfluoroalkyl, and (C₁-C₆)alkoxy,

phenyloxyphenyl, and

- substituted phenyloxyphenyl chosen from mono-, di-, and tri-substituted phenyloxyphenyl wherein the substituents are independently chosen from hydroxy, nitro, cyano, amino, halo, sulfonamido, (C₁-C₆)alkyl, (C₁-C₆)perhaloalkyl, and (C₁-C₆)alkoxy.
- 25. (New) At least one chemical entity chosen from:
- 4-methyl-N-(3-{4-[methyl-(4-trifluoromethylbenzyl)-amino]-pyrimidin-2-yl}-phenyl)-benzamide;

5-bromo-N3-(2-methoxybenzyl)-pyrazine-2,3-diamine;

(4-{6-[(4-chlorobenzyl)-methylamino]-pyrazin-2-yl}-phenyl)-piperidin-1-yl-methanone;

(4-chlorobenzyl)-[6-(3-dibenzylamino-phenyl)-pyrimidin-4-yl]-methyl-amine;

N-(3-{4-[(4-methoxybenzyl)-methylamino]-pyrimidin-2-yl}-phenyl)-4-methylbenzamide; and pharmaceutically acceptable salts, hydrates, solvates, crystal forms, diasteromers, and prodrugs thereof.

- 26. (New) At least one chemical entity of claim 25 wherein in an in vitro assay of kinase modulation, the at least one chemical entity exhibits an IC_{50} value less than or equal to 25 micromolar.
- 27. (New) A pharmaceutical composition comprising at least one chemical entity of claim 25 and at least one vehicle chosen from pharmaceutically acceptable carriers and excipients.
- 28. (New) A method of treating a kinase-implicated condition in a mammal, comprising administering to the mammal a therapeutically effective amount of at least one chemical entity of claim 25.
- 29. (New) The method of claim 28 wherein the mammal is a human.
- 30. (New) The method of claim 28 wherein the mammal is chosen from dogs and cats.
- 31. (New) The method of claim 28 wherein the mammal is a livestock animal.
- 32. (New) A method for identifying a kinase, comprising contacting an organism, cell, or preparation comprising the kinase with at least one chemical entity of claim 25 and detecting modulation of an activity of the kinase.